Safety Data Sheet

Rothsay – Protein Meals

SECTION 1. IDENTIFICATION

Product Identifier:	**Meat and Bone Meal, Pork Meal, Poultry Meal, Low Ash Poultry Meal, Salmon Meal, Feather Meal and Blood Meal**
Recommended Use	**To be used as an ingredient in pet food, animal feed and a variety of industrial applications (ie:fertilizer)**
Restrictions on Use	**Not for human consumption**
Supplier	**Rothsay, A Division of Darling International Canada Inc.**
Emergency Telephone Number	**1-800-263-0302**

SECTION 2. HAZARD IDENTIFICATION

Appearance Protein meals range in color from light beige to brown. The exception to this is Blood Meal which is black.

Classification This product is NOT classified as hazardous according to the Canadian Controlled Products Regulations (CPR); 29 CFR 1910, amended to conform to the United Nations Globally Harmonized System of Classification and Labelling of Chemicals (OSHA / GHS) (US); and/or NOM-002-SCT-2003 (Mexico).

Label Elements

Hazard Symbol – None.

Signal Word – Warning

Hazard Statement – May form combustible dust concentrations in the air.

Precautionary Statement:

- Prevention: Keep away from heat/sparks/open flames/hot surfaces. No smoking. Prevent dust accumulation to avoid explosion.
- Response: Wash hands after handling.
- Storage: Store away from incompatible materials.
- Disposal: Dispose waste and residue in accordance with local authority requirements.

Other Hazards None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Concentration	Common name / Synonyms	Other identifiers
Meat and Bone Meal	NA	99-100%	NA	
Blood Meal	NA	99-100%	NA	
Poultry Meal	NA	99-100%	NA	Poultry By-Product Meal
Pork Meal	NA	99-100%	NA	
Chicken Meal	NA	99-100%	NA	

Feather Meal	NA	99-100%	NA	
Low Ash Poultry Meal	NA	99-100%	NA	Poultry Meal, Poultry By-Product Meal
Salmon Meal	NA	99-100%	NA	Fish Meal

Notes

This safety data sheet is intended to communicate potential health hazards and potential physical hazards associated with the products covered by this sheet and is not intended to communicate product specification information. For product specification information, contact you Rothsay representative.

Additives: May contain anti-oxidant (Stabilizer). Please see the separate anti-oxidant SDS if anti-oxidant is present.

SECTION 4. FIRST-AID MEASURES

Inhalation	If breathing is difficult, remove to fresh air and keep at rest in a position of comfortable breathing. Call a physician if symptoms develop or persist.
Skin Contact	Rinse skin with water/shower. Get medical attention if irritation develops and persists.
Eye Contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately.
Most Important Symptoms and	Direct contact with eyes may cause temporary irritation.
Immediate Medical Attention and Special Treatment	Treat symptomatically.
General Information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media	Water fog. Foam. Dry Chemical powder. Carbon dioxide (CO2). Apply extinguishing media carefully to avoid creating airborne dust.
Unsuitable Extinguishing Media	None known.
Specific Hazards Arising from the Product	Dust may form explosive mixture with air. Avoid generating dust; fine dust dispersed in the air n sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.
Special Protective Equipment and	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Specific methods	Cool containers exposed to flames with water until well after the fire is out.
General Fire Hazards	No unusual fire or explosion hazards noted.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures.	Use only non-sparking tools. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Wear appropriate personal protective equipment. Ensure adequate ventilation. Local Authorities should be advised if significant spillages cannot be contained.
Methods and materials for containment and	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. absorb in vermiculite, dry sand or earth and place into

cleaning up.	containers. Avoid dispersal of dust in the air (ie: clearing dust surfaces with compressed air). Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material (eg: cloth, fleece). Clean surface thoroughly to remove residual contamination.
Environmental Precautions	Avoid discharge into drains, water courses or onto the ground.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling	Use with adequate ventilation. Eliminate all sources of ignition. Minimize dust generation and accumulation. Combustible dust clouds may be created where operations produce fine material (dust). Avoid significant deposits of material, especially on horizontal surfaces, which may become airborne and form combustible dust clouds and may contribute to secondary explosions. Handling and processing operations should be conducted in accordance with “best practices”. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Avoid direct contact with eyes.
Conditions for Safe Storage	Keep away from heat, sparks or open flame. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Keep container tightly closed. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Routine housekeeping should be instituted to ensure that dusts don’t accumulate on surfaces.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Appropriate Engineering Controls	Ventilation and other forms of engineering controls are the preferred means for controlling exposure.
Individual Protection Measures	
Eye/Face Protection	Keep away from eyes. Eye contact can be avoided by using chemical safety glasses, goggles and/or face shield. Have eye washing facilities readily available where eye contact can occur.
Skin Protection	Wash hands with soap and water. Protective gloves recommended.
Respiratory Protection	Use dust masks in enclosed spaces.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Form	Powder.
Color	Beige, brown, black.
Odour	Cooked meat odor.
Odour Threshold	Characteristic.
Physical State Form	Solid
Melting Point	Decomposes
Boiling Point	N/A
Flash Point	>250^{0}C (fat content only)
Evaporation Rate	N/A
Flammability (solid, gas)	Not available.

Upper and Lower Flammability or Explosive Limit	Not available.
Vapour Pressure	Not available.
Vapour Density (air = 1)	Not available.
Relative Density (water = 1)	Averages around 0.50g/mL
Solubility in Water	Insoluble.
Solubility in Other Liquids	Insoluble.
Partition Coefficient, n-Octanol / Water (Log Kow)	N/A
Auto-ignition Temperature	Not available.
Decomposition Temperature	Not available.
Viscosity	N/A
Cloud Point	N/A
Conductivity	Not available.
Other Data	Chemical family – Protein, Mineral and Lipid

SECTION 10. STABILITY AND REACTIVITY

Reactivity	Material is stable and non-reactive under normal conditions of use, storage and transport.
Chemical Stability	Material is stable under normal conditions.
Conditions to Avoid	Keep away from sparks, heat and open flame. Minimize dust generation and accumulation.
Incompatible Materials	Strong oxidizing agents.
Hazardous Decomposition Products	Carbon oxides, not anticipated under normal conditions.
Possibility Hazardous Reactions	Not anticipated under normal conditions.

SECTION 11. TOXICOLOGICAL INFORMATION

Routes of Exposure	Inhalation, ingestion, skin and eye contact.
Acute Toxicity	Not applicable.
Eye Contact	Get medical attention if eye irritation develops or persists.
Skin Contact	Get medical attention if skin irritation develops or persists.
Inhalation	If breathing difficulty occurs, get medical attention.
Ingestion	Routine use of this product is not expected to cause any situation where ingestion occurs in a dangerous amount.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity	Material is not classified as harmful to aquatic organisms. However, secondary effects such as lowered dissolved oxygen when introduced to surface water can be toxic to aquatic life.

Persistence and Degradability	Readily biodegradable in the environment.
Bioaccumulation Potential	This material is not expected to bioaccumulate in aquatic animals.
Mobility in Soil	Not classified in terms of mobility in air, soil and water.
Other Adverse Effects	

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods This material, as supplied, when discarded or disposed of, is not a hazardous waste according to federal regulations. It is the responsibility of the user of the material to characterize and determine, at the time of disposal, whether the material is a hazardous waste.

For additional handling information and protection of employees, see Section 7 (Handling and Storage) and Section 8 (Exposure Controls/Personal Protection).

SECTION 14. TRANSPORT INFORMATION

Domestic transport regulations (Canada)
TDG – Not regulated

Domestic transport regulations (USA)
DOT – Not regulated

Domestic transport regulations (Mexico)
MEX – Not regulated

International transport regulations (Canada)
ICAO – Not regulated
IATA – Not regulated
IMDG/IMO – Not regulated

SECTION 15. REGULATORY INFORMATION

Federal Regulations According to the Canadian Controlled Products Regulations (CPR) this material is not deemed a hazardous material.

Other Regulations Please check local, regional or provincial regulations for any additional requirements

SECTION 16. OTHER INFORMATION

Date of Latest Revision	07/18/2018
NFPA Ratings	Health – 0 Flammability – 2 Instability – 0

Disclaimer

NOTICE: The information presented herein is based on data considered to be accurate as of the date of preparation of this Safety Data Sheet. Adequate training and instruction should be given by you or your employees and affected personnel. Appropriate warnings and sage handling procedures should be provided by you to handlers and users. Appropriate warnings and sage handling procedures should be provided by you to handlers and users. Additionally, the user should review this information, satisfy itself as to its suitability and completeness, and pass on the information to its employees or customers in accordance with the applicable federal, state, provincial or local hazard communication requirements. This SDS may not be used as a commercial specification sheet of manufacturer or seller, and no warranty or representation, expressed or implied, is made as to the accuracy or comprehensiveness of the foregoing data and safety information, nor is any authorization given or implied to practice any patented invention without a license. In addition, vendor neither assumes nor retains any responsibility for any damage or injury resulting from abnormal use, from any failure to adhere to appropriate practices, or from any hazards inherent the material. Moreover, unless an employee or a customer accesses or receives a SDS directly from the company, there is no assurance that a document obtained from alternate sources is the most currently available SDS.